What is claimed is:

1. A method of preparing a catalyst for polymerization of an aliphatic polycarbonate, comprising:

oxidizing a dicarboxylic acid precursor and a zinc precursor under a pressurized condition in water.

2. The method of claim 1, wherein the equivalent ratio of the zinc precursor and the dicarboxylic acid precursor is 1 : 3 to 3 : 1.

3. The method of claim 1, wherein the oxidation is performed at a temperature between 120 and 180°C.

4. The method of claim 1, wherein the dicarboxylic acid precursor and the zinc precursor are respectively 0.1 to 50 volume % of water.

5. The method of claim 4, wherein the dicarboxylic acid precursor and the zinc precursor are respectively 1 to 10 volume % of water.

6. The method of claim 1, wherein the zinc precursor is selected from the group consisting of zinc acetate dihydrate, zinc hydroxide, zinc nitrate hexahydrate, zinc perchlorate hexahydrate, zinc oxide and zinc sulfate.

7. The method of claim 1, wherein the dicarboxylic acid precursor is selected from the group consisting of pentane diol, hexane diol, 1,5-dibromopentane, 1,5-dichloropentane, 1,6-dichlorohexane, 1,6-dibromohexane, glutanonitrile, adiponitrile, glutaimide, adipicimide, glutarylaldehyde, and adipicaldehyde.

8. A method of polymerizing an aliphatic polycarbonate, comprising:

copolymerizing alkylene oxide and carbon dioxide in the presence of a catalyst, the catalyst being prepared by oxidizing a dicarboxylic acid precursor and a zinc precursor under a pressurized condition in water.